

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 12, 15-17, 19 and 21-23 in accordance with the following:

1. (CURRENTLY AMENDED) A process executing device in a data interchange system for executing a series of process flows among a plurality of process executing devices, said process executing device comprising:

a process executing data interchanging unit interchanging process executing data for executing a process with another process executing device, and

an interprocess association information interchanging unit interchanging with the other process executing device interprocess association information indicative of that associates the process executed by the process executing device in association with the process executed by the other process executing device based on a correspondence relation between the process executing data received from the process executing data interchanging unit and the process executed by the other process executing device, and

wherein processes are associated with one another among the plurality of process executing devices by sending and receiving data for executing a process without requiring sending and receiving of a process identifier, and

a process that cannot be associated with other processes in said process executing device is associated using association information that associates the process executed by said other process executing devices.

2. (PREVIOUSLY PRESENTED) The process executing device in the data interchange system according to claim 1, wherein said interprocess association information is information that associates the processes with one another using a part of the process executing data.

3. (PREVIOUSLY PRESENTED) The process executing device in the data interchange system according to claim 1, wherein said interprocess association information is part of the process executing data, and is the information for associating processes with each other using data that takes an exclusive value for each process of the series of process flows.

4. (PREVIOUSLY PRESENTED) The process executing device in the data interchange system according to claim 1, wherein said interprocess association information interchanging unit interchanges the interprocess association information with the other process executing device using a transfer method different from the method used by said process executing data interchanging unit.

5. (PREVIOUSLY PRESENTED) The process executing device in the data interchange system according to claim 1, wherein said interprocess association information interchanging unit interchanges the interprocess association information at a timing that is not synchronized with the timing for interchanging the process executing data by said process executing data interchanging unit.

6. (PREVIOUSLY PRESENTED) The process executing device in the data interchange system according to claim 5, wherein said interprocess association information interchanging unit periodically and collectively interchanges the interprocess association information.

7. (PREVIOUSLY PRESENTED) The process executing device in the data interchange system according to claim 5,

wherein said interprocess association information interchanging unit transmits to the other process executing device inquiry information for inquiring about the process which is executed by the other process executing device and is related with the process executed by the process executing device in addition to the process association information, and

wherein the other process executing device further comprises an inquiry response unit associating the processes executed by both process executing devices and responding to the inquiry information from the process executing device.

8. (PREVIOUSLY PRESENTED) The process executing device in the data interchange system according to claim 5, further comprising:

a process association information request unit requesting said interprocess association information interchanging unit in the other process executing device to transmit the interprocess association information necessary for an inquiry about the process which is executed by the other process executing device and is which related to the process executed by the process executing device in addition to the process association information before the inquiry; and

an inquiry unit for associating the processes executed by both process executing devices using the transmitted process association information and performing the inquiry based on the association result.

9. (PREVIOUSLY PRESENTED) The process executing device in the data interchange system according to claim 1, wherein said interprocess association information interchanging unit dynamically determines the other process executing device to which the interprocess association information is transmitted using a part of the process executing data.

10. (PREVIOUSLY PRESENTED) The process executing device in the data interchange system according to claim 1, further comprising:

an association definition storing unit storing a method to define the interprocess association as an association definition; and

an association unit associating the process executed by the process executing device with the process executed by the other process executing device.

11. (PREVIOUSLY PRESENTED) The process executing device in the data interchange system according to claim 1, further comprising:

a device interprocess association unit associating the processes executed by the process executing device that are identical to the process executed by the other process executing device using the interprocess association information transmitted from the other process executing device.

12. (CURRENTLY AMENDED) A data interchange system for executing a series of process flows among a plurality of process executing devices using a process executing data interchanging unit interchanging process executing data between the process executing devices, comprising:

an interprocess association information storing unit storing interprocess association information indicative of that associates a process executed by each of said plurality of process executing devices in association with the process executed by the other process executing device based on a correspondence relation between process executing data received from the process executing data interchanging unit and the process executed by the other process executing device, which is transmitted by the plurality of process executing devices; and

an interprocess association information distribution unit distributing the interprocess association information stored in said interprocess association information storing unit to the process executing device which is related to the interprocess association information, and wherein processes are associated with one another among the plurality of process executing devices by sending and receiving data for executing a process without requiring sending and receiving of a process identifier, and

a process that cannot be associated with other processes in said process executing device is associated using association information that associates the process executed by said other process executing device.

13. (PREVIOUSLY PRESENTED) The data interchange system according to claim 12, further comprising an addressee definition storing unit storing a method for determining an addressee of the interprocess association information as an addressee definition, and wherein said interprocess association information distribution unit distributes interprocess association information based on the addressee definition.

14. (PREVIOUSLY PRESENTED) The data interchange system according to claim 12, wherein said interprocess association information distribution unit dynamically determines the addressee of the process association information using a part of a process executing data transmitted from the plurality of process executing devices.

15. (CURRENTLY AMENDED) A data interchange system for executing a series of process flows among a plurality of process executing devices using a process executing data interchanging unit interchanging process executing data between the process executing devices, comprising:

an interprocess association unit associating the processes executed among the plurality of process executing devices based on a correspondence relation between process executing data received from the process executing data interchanging unit and a process using the data transmitted from the plurality of process executing devices and generating process association information indicative of said processes; and

an interprocess association information distribution unit distributing the process association information generated by said interprocess association unit to the process executing device which is related to the interprocess association information, and

wherein said processes are associated with one another among the plurality of process executing devices by sending and receiving data for executing a process without requiring sending and receiving of a process identifier, and

a process that cannot be associated with other processes in said process executing device is associated using association information that associates the process executed by one of said plurality of process executing devices.

16. (CURRENTLY AMENDED) A data interchange device for interchanging data concerning a process included in a series of process flows with an external device, comprising:

an executing data interchanging unit interchanging a process executing data with the external device; and

an interprocess association information interchanging unit interchanging with the external device interprocess association information ~~which indicative of~~ associates a process executed by the process executing device in association with the process executed by the external device based on a correspondence relation between the process executing data received from the executing data interchanging unit and the process executed by the external device, and

wherein processes are associated with one another among a plurality of process executing devices by sending and receiving data for executing a process without requiring sending and receiving of a process identifier, and

a process that cannot be associated with other processes in said process executing device is associated using association information that associates the process executed by said external device.

17. (CURRENTLY AMENDED) A data interchange method for interchanging data concerning a process included in a series of process flows with an external device, comprising:

interchanging process executing data with the external device via a first communication route; and

interchanging with the external device, via a second communication route, interprocess association information ~~which associates~~ indicative of the process executed by the process executing device in association with the process executed by the external device based on a correspondence relation between the process executing data and the process executed by the external device, and

wherein processes are associated with one another among a plurality of process executing devices by sending and receiving data for executing a process without requiring sending and receiving of a process identifier, and

a process that cannot be associated with other processes in said process executing device is associated using association information that associates the process executed by said external device.

18. (PREVIOUSLY PRESENTED) The data interchange method according to claim 17, wherein in interchanging the interprocess association information, the process executing device uses a data transfer method different from a method for interchanging the process executing data.

19. (CURRENTLY AMENDED) A storage medium which stores a program to make a computer control interchanging data concerning a process included in a series of process flows with an external device, the program making said computer perform the process of:

interchanging process executing data with the external device via a first communication route; and

interchanging with the external device, via a second communication route, interprocess association information ~~which associates~~ indicative of the process executed by the process executing device in association with the process executed by the external device based on a correspondence relation between the process executing data and the process executed by the external device, and

wherein processes are associated with one another among a plurality of process executing devices by sending and receiving data for executing a process without requiring sending and receiving of a process identifier, and

a process that cannot be associated with other processes in said process executing device is associated using association information that associates the process executed by said external device.

20. (PREVIOUSLY PRESENTED) The storage medium according to claim 19, wherein, in interchanging the interprocess association information, the process executing device uses a data transfer method different from a method for interchanging the process executing data.

21. (CURRENTLY AMENDED) A data interchange device for interchanging data concerning a process included in a series of process flows with an external device, comprising:
executing data interchanging means for interchanging process executing data with the external device; and

interprocess association information interchanging means for interchanging with the external device interprocess association information ~~which associates indicative of~~ the process executed by the process executing device in association with the process executed by the external device based on a correspondence relation between the process executing data received from the executing data interchanging means and the process executed by the external device, and

wherein processes are associated with one another among a plurality of process executing devices by sending and receiving data for executing a process without requiring sending and receiving of a process identifier, and

a process that cannot be associated with other processes in said process executing device is associated using association information that associates the process executed by said external device.

22. (CURRENTLY AMENDED) A computer data signal embodied in a carrier wave and representing a program that makes a computer control interchanging data concerning a process included in a series of process flows with an external device, the program making the computer execute the process of:

interchanging process executing data with the external device via a first communication route; and

interchanging with the external device, via a second communication route, interprocess association information ~~which associates indicative of~~ the process executed by the process executing device in association with the process executed by the external device based on a correspondence relation between the process executing data and the process executed by the external device, and

wherein processes are associated with one another among a plurality of process executing devices by sending and receiving data for executing a process without requiring sending and receiving of a process identifier, and

a process that cannot be associated with other processes in said process executing device is associated using association information that associates the process executed by said external device.

23. (CURRENTLY AMENDED) A method for interchanging data between an external device and a processor executing a process in a series of process flows, comprising:

obtaining, via a first communication route, interprocess association information associating first and second processes respectively executed by the processor and the external device based on a correspondence relation between the second process and process executing data of the first process; and

interchanging, via a second communication route, the process executing data and the interprocess association information indicative of said first and second processes between the processor and the external device, and

wherein processes are associated with one another among a plurality of processors by sending and receiving data for executing a process without requiring sending and receiving of a process identifier, and

a process that cannot be associated with other processes in said processor is associated using association information that associates the process executed by said external device.